



# *COMMONWEALTH of VIRGINIA*

## *DEPARTMENT OF ENVIRONMENTAL QUALITY*

### PIEDMONT REGIONAL OFFICE

4949-A Cox Road, Glen Allen, Virginia 23060

(804) 527-5020 Fax (804) 527-5106

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Douglas W. Domenech  
Secretary of Natural Resources

David K. Paylor  
Director

Michael P. Murphy  
Regional Director

**STATE WATER CONTROL BOARD  
ENFORCEMENT ACTION - ORDER BY CONSENT  
ISSUED TO  
HENRICO COUNTY  
FOR  
HENRICO COUNTY WATER RECLAMATION FACILITY  
VPDES Permit No. VA0063690**

### **SECTION A: Purpose**

This is a Consent Order issued under the authority of Va. Code § 62.1-44.15, between the State Water Control Board and Henrico County, regarding the Henrico County Water Reclamation Facility, for the purpose of resolving certain violations of the State Water Control Law, the Virginia Pollutant Discharge Elimination System Regulation, and the Permit.

### **SECTION B: Definitions**

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Board" means the State Water Control Board, a permanent citizens' board of the Commonwealth of Virginia, as described in Va. Code §§ 10.1-1184 and 62.1-44.7.
2. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia, as described in Va. Code § 10.1-1183.
3. "Director" means the Director of the Department of Environmental Quality, as described in Va. Code § 10.1-1185.
4. "DMR" means Discharge Monitoring Report.

5. "Facility" or "Plant" means the Henrico County Water Reclamation Facility located at 9101 WRVA Road in Henrico County, Virginia, which treats and discharges treated sewage and other municipal wastes, for the residents and businesses of Henrico County.
6. "Henrico" means Henrico County, a political subdivision of the Commonwealth of Virginia. Henrico is a "person" within the meaning of Va. Code § 62.1-44.3.
7. "Notice of Violation" or "NOV" means a type of Notice of Alleged Violation under Va. Code § 62.1-44.15.
8. "O&M" means operations and maintenance.
9. "Order" means this document, also known as a "Consent Order" or "Order by Consent," a type of Special Order under the State Water Control Law.
10. "Permit" means VPDES Permit No. VA0063690, which was issued under the State Water Control Law and the Regulation to Henrico on December 2, 2005 and which expires on December 1, 2010.
11. "Pollutant" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 USC § 2011 *et seq.*)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water... 9 VAC 25-31-10.
12. "Pollution" means such alteration of the physical, chemical, or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety, or welfare or to the health of animals, fish, or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses, provided that (i) an alteration of the physical, chemical, or biological property of state waters or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not sufficient to cause pollution but which, in combination with such alteration of or discharge or deposit to state waters by other owners, is sufficient to cause pollution; (ii) the discharge of untreated sewage by any owner into state waters; and (iii) contributing to the contravention of standards of water quality duly established by the Board, are "pollution." Va. Code § 62.1-44.3.
13. "PRO" means the Piedmont Regional Office of DEQ, located in Glen Allen, Virginia.
14. "Regulation" means the VPDES Permit Regulation, 9 VAC 25-31-10 *et seq.*
15. "State Water Control Law" means Chapter 3.1 (§ 62.1-44.2 *et seq.*) of Title 62.1 of the Va. Code.

16. "State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands. Va. Code § 62.1-44.3.
17. "Va. Code" means the Code of Virginia (1950), as amended.
18. "VAC" means the Virginia Administrative Code.
19. "VPDES" means Virginia Pollutant Discharge Elimination System.
20. "Warning Letter" or "WL" means a type of Notice of Alleged Violation under Va. Code § 62.1-44.15.

### **SECTION C: Findings of Fact and Conclusions of Law**

1. Henrico owns and operates the Henrico County Water Reclamation Facility in Henrico County, Virginia. The Permit allows Henrico to discharge treated sewage and other municipal wastes from the Plant to the James River, in strict compliance with the terms and conditions of the Permit.
2. The receiving streams influenced by Henrico's collection system are the James River and the following tributaries: Gillies Creek, Brandy Branch, Meredith Branch, UT to Gilles Creek, Horse Swamp Creek, Almond Creek, Stony Run, White Oak Swamp, Fourmile Creek, Upham Brook, Hungary Creek, Horsepen Branch, Rocky Branch, Trumpet Branch, Roundabout Creek, and Lake Overton in the Lower James River Basin; Tuckahoe Creek, Stony Run, Cabin Branch, and UT to Deep Run in the Middle James River Basin; and UT to Opossum Creek in the York River Basin. The James River and many of the tributaries were assessed as impaired on the 2008 305(b)/303(d) Water Quality Assessment. The James River was impaired due to *E. coli*, PCBs in fish tissue, inadequate submerged aquatic vegetation (SAV), and chlorophyll *a*. The tributary impairments vary, but include *E. coli*, submerged aquatic vegetation, dissolved oxygen, pH, and impaired benthic community. In addition, portions of the area are included under the VDH Fish Consumption Advisory for kepone. Several bacterial TMDLs have been adopted for the streams, including the Tuckahoe Creek-, Totopotomoy Creek-, Fourmile Creek-, Upham Brook-, and White Oak Swamp watersheds.
3. None of these waters are currently proposed for designation as Tier 3 exceptional waters.
4. From June 20, 2009, through December 3, 2009, Henrico reported 26 unauthorized discharges to the Department from the Facility's sewer collection system.
5. DEQ issued Notice of Violation W2009-12-P-0003 for the unauthorized discharges on December 18, 2009.

6. On January 14, 2010, the Department met with Henrico to discuss the NOV and the related unauthorized discharges. Henrico submitted a plan consisting of a list of inflow and infiltration ("I&I") projects designed to eliminate the number of unauthorized discharges which occur from Facility collection system. The plan and schedule are incorporated in Appendix A of the Order.
7. A review of DEQ files indicates that from December 3, 2009 through June 11, 2010, 50 additional unauthorized discharges occurred.
8. In a letter dated April 6, 2010, Henrico reported Permit effluent violations of ammonia, total suspended solids ("TSS") and carbonaceous biochemical oxygen demand ("CBOD"). Henrico stated that the violations occurred because the Plant had lost nitrification capability on February 3, 2010 due to influent flow that was higher than the Plant could handle. In addition, Henrico stated that the total available aerobic volume was not in service because past process control operations during high flow indicated that the secondary clarifier would be adequate in sustaining the biomass.
9. Va. Code § 62.1-44.5 states that: "[E]xcept in compliance with a certificate issued by the Board, it shall be unlawful for any person to discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances."
10. The Regulation, at 9 VAC 25-31-50, and Permit Part II F. also states that except in compliance with a VPDES permit, or another permit issued by the Board, it is unlawful to discharge into state waters sewage, industrial wastes or other wastes.
11. Va. Code § 62.1-44.15(5a) states that a VPDES permit is a "certificate" under the statute.
12. The Department has issued no permits or certificates to Henrico other than VPDES Permit No. VA0063690.
13. The streams listed in paragraph C.2, above, are surface waters located wholly within the Commonwealth and are "state waters" under State Water Control Law.
14. Based on a review of DMRs, DEQ files, the sanitary sewer overflow reports submitted since June 2009, and discussions at the January 14, 2010 meeting, the Board concludes that Henrico has violated the Permit, Va. Code 62.1-44.5, and 9 VAC 25-31-50(A), by discharging untreated sewage and municipal wastes from its collection system and partially treated wastes from the Plant, while concurrently failing to comply with the conditions of the Permit, as described above.
15. In order for Henrico to return to compliance, DEQ staff and representatives of Henrico have agreed to the Schedule of Compliance, which is incorporated as Appendix A of this Order.

**SECTION D: Agreement and Order**

Accordingly, by virtue of the authority granted it in Va. Code §§ 62.1-44.15, the Board orders Henrico, and Henrico agrees to:

1. the termination of the Consent Order issued by the Board to Henrico on January 9, 2003, amended in 2005 and 2007;
2. perform the actions described in Appendix A and B of this Order; and
3. pay a civil charge of \$29,500 within 30 days of the effective date of the Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order or cashier's check payable to the "Treasurer of Virginia," and delivered to:

Receipts Control  
Department of Environmental Quality  
Post Office Box 1104  
Richmond, Virginia 23218

Henrico shall include its Federal Employer Identification Number (FEIN) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF).

**SECTION E: Administrative Provisions**

1. The Board may modify, rewrite, or amend this Order with the consent of Henrico for good cause shown by Henrico, or on its own motion pursuant to the Administrative Process Act, Va. Code § 2.2-4000 *et seq.*, after notice and opportunity to be heard.
2. This Order addresses and resolves only those violations specifically identified in Section C of this Order. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the Facility; or (3) taking subsequent action to enforce the Order.
3. For purposes of this Order and subsequent actions with respect to this Order only, Henrico admits the jurisdictional allegations, findings of fact, and conclusions of law contained herein.
4. Henrico consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.

5. Henrico declares it has received fair and due process under the Administrative Process Act and the State Water Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to modify, rewrite, amend, or enforce this Order.
6. Failure by Henrico to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
8. Henrico shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. Henrico shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. Henrico shall notify the DEQ Regional Director verbally within 24 hours and in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:
  - a. the reasons for the delay or noncompliance;
  - b. the projected duration of any such delay or noncompliance;
  - c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
  - d. the timetable by which such measures will be implemented and the date full compliance will be achieved.

Failure to so notify the Regional Director verbally within 24 hours and in writing within three business days, of learning of any condition above, which Henrico intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.

9. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
10. This Order shall become effective upon execution by both the Director or his designee and Henrico. Nevertheless, Henrico agrees to be bound by any compliance date which precedes the effective date of this Order.

11. This Order shall continue in effect until:

- a. Henrico petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
- b. the Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to Henrico.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Henrico from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. Any plans, reports, schedules or specifications attached hereto or submitted by Henrico and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
13. The undersigned representative of Henrico certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind Henrico to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of Henrico.
14. This Order constitutes the entire agreement and understanding of the parties concerning settlement of the violations identified in Section C of this Order, and there are no representations, warranties, covenants, terms or conditions agreed upon between the parties other than those expressed in this Order.
15. By its signature below, Henrico voluntarily agrees to the issuance of this Order.

And it is so ORDERED this \_\_\_\_\_ day of \_\_\_\_\_, 2010.

---

Michael P. Murphy, Regional Director  
Department of Environmental Quality

Consent Order

County of Henrico; VPDES Permit No. VA0063690

Page 8 of 13

Henrico County voluntarily agrees to the issuance of this Order.

Date: 9/29/10 By: [Signature], Henrico County Manager  
TM

Commonwealth of Virginia

City/County of Henrico

The foregoing document was signed and acknowledged before me this 29<sup>th</sup> day of

September, 2010, by Virgil Hazelett who is Henrico County Manager, on

behalf of the County.

[Signature]  
Notary Public

221356  
Registration No.

My commission expires: 4/30/2013

Notary seal:





## **APPENDIX A SCHEDULE OF COMPLIANCE**

### **1. Treatment Plant**

No later than 180 days after the effective date of this Order, Henrico must submit to the Department for approval a formal written standard operating procedures (SOP) manual specifically outlining the most optimal plant configuration and process modes for a given set of flow, temperature, and influent loading conditions. Immediately upon approval by the Department, Henrico shall implement the SOP.

### **2. Collection System Rehabilitation Projects**

Henrico must complete the following collection system projects as outlined in the schedule in Appendix B: On July 15, 2010, and every six (6) months until this Order is terminated, submit to the Department a progress report of the status of each uncompleted I&I project.

Any changes to the schedule or plan must be approved in advance in writing by the Department.

### **3. DEQ Contact**

Unless otherwise specified in this Order, Henrico shall submit all requirements of Appendix A of this Order to:

**Frank Lupini  
Enforcement Specialist  
VA DEQ –Piedmont Regional Office  
4949A Cox Road,  
Glen Allen, Virginia 23060  
Frank.Lupini@deq.virginia.gov**

## APPENDIX B

PROJECT	PROJECT DESCRIPTION	COMPLETION DATE
Mapleton Road Sewer Rehab	Replace 796 feet of 8 inch diameter sewer main in easements off Mapleton Ave at Patterson Ave. Cured-in-place lining method of 9,800 feet of 15 inch through 27 inch diameter sewer main along Route 5 (New Market Road), from approximately 1,000 feet west of Mill Road westward to the I-295 exchange. In addition, 21 manholes are to be epoxy-lined and sealed. Cured-in-place lining method of 546 feet of 12 inch diameter sewer main crossing Interstate 95 at Rte. 301. Install 18 feet of 8 inch diameter sewer main and 2 new manholes.	December 15, 2010
Route 5 Sewer Interceptor Rehab	Replace 154 feet of 8 inch diameter sewer pipe with 10 inch diameter pipe on the property of the Tuckahoe YMCA on Patterson Ave.	June 30, 2011
I95 Crossing Rte 301	Replace 2,445 feet of 8 inch diameter sewer main in various streets of the Central Gardens Subdivision	June 30, 2011
YMCA Patterson Creek Crossing	Cured-in-place lining method of 4,345 feet of 8 inch through 15 inch diameter sewer main in easements in Cheswick Park on Forest Ave.	December 15, 2011
Central Gardens Sewer Rehab	Cured-in-place lining method of 1,032 feet of 8 inch diameter sewer main in easements off Westmoor Drive at Patterson Avenue.	December 15, 2011
Forest Ave (Cheswick Park) Sewer Rehabilitation	Replace 1,450 feet of 8 inch diameter sewer main in Harris Avenue from Laburnum Ave to Byron Street.	June 30, 2012
9314 Westmoor Drive Sewer Rehab	Cured-in-place lining method of 688 feet of 10 inch diameter sewer main in easements off Belle Glade Drive at Glenwood Street. Replace 753 feet of 8 inch diameter sewer main in Belle Glade Drive and Glenwood Street.	June 30, 2012
Harris Avenue Sewer Rehab		
Greendale Manor Belle-Glade-Area		December 15, 2012

Strawberry Hill Basin Sewer Rehabilitation (SH-01A)	Rehabilitation of a sub-basin to the Strawberry Hills Sewer Pumping Station. Provide SSES of 4.6 miles of sewer resulting in rehabilitation of an estimated 1.9 miles that is approximately 40% of sewers in the area.	June 15, 2013
Broadwater II Area Sewer Rehab Phase 2	Cured-in place lining method of 21,500 feet of 8 inch sewer main and replacement of 6,665 feet of 8 inch and 12 inch diameter sewer main in Highland Springs.	June 30, 2013
Broadwater II Area Sewer Rehab Phase 1	Cured-in place lining method of 20,200 feet of 8 inch sewer main and replacement of 7,700 feet of 8 inch diameter sewer main in Highland Springs.	June 30, 2013
Contract 7 - Four Mile Ck Trunk Sewer	Rehabilitation using Sliplining method of 18,000 feet of 84 inch diameter sewer main with 72 inch and 78 inch diameter Fiberglass Reinforced Polyester pipe.	December 15, 2013
Bremner Boulevard & Compton Road & Staples Mill Rd	Replacement of 2,690 feet of 12 inch and 8 inch diameter sewer main.	December 15, 2013
Strawberry Hill Basin Sewer Rehabilitation (SH-01B)	Rehabilitation of a sub-basin to the Strawberry Hills Sewer Pumping Station. Provide SSES of 2.26 miles of sewer resulting in rehabilitation of an estimated 1 mile that is approximately 40% of sewers in the area.	December 15, 2013
Keller Road, Michaux Lane & Turnbull Avenue & Brawner Drive	Replace 3,400 feet of 8 inch diameter sewer mains.	June 15, 2014
Hawthorne Avenue Area Easements	Replace 4,200 feet of 8 inch diameter sewer main in easements parallel to Hawthorne Avenue from Serafim Avenue to Upham Brook area	December 15, 2014
Three Chopt Road (Foxcroft Rd to Foster Rd)	Replace 1,000 feet of 8 inch diameter sewer main.	June 15, 2015
Strawberry Hill Basin Sewer Rehabilitation (SH- 01C - pt 1)	Rehabilitation of a sub-basin to the Strawberry Hills Sewer Pumping Station. Provide SSES of 5.45 miles of sewer resulting in rehabilitation of an estimated 2.2 miles that is approximately 40% of sewers in the area.	June 15, 2015
Strawberry Hill Basin Sewer Rehabilitation (SH-01C - pt 2)	Rehabilitation of a sub-basin to the Strawberry Hills Sewer Pumping Station. Provide SSES of 5.45 miles of sewer resulting in rehabilitation of an estimated 2.2 miles that is approximately 40% of sewers in the area.	June 15, 2015
Dustin Drive & Pepper Avenue & Christie Rd	Replace 2,700 feet of 8 inch diameter sewer main.	December 15, 2015

Lakeside Boulevard	Replace 2,515 feet of 10" and 8" diameter sewer main in Lakeside Blvd from Third Street and adjoining easements. Rehabilitation of a sub-basin to the Strawberry Hills Sewer Pumping Station. Provide SSES of 5.54 miles of sewer resulting in rehabilitation of an estimated 2.2 mile that is approximately 40% of sewers in the area. Rehabilitation of a sub-basin to the River Road Sewer Pumping Station. Provide SSES of 4.64 miles of sewer resulting in rehabilitation of an estimated 1.9 miles that is approximately 40% of sewers in the area. Rehabilitation of 2,255 feet of 15 inch to 27 inch diameter sewer main along creek in Lakeside area.	December 15, 2015
Strawberry Hill Basin Sewer Rehabilitation (SH-02A)		June 15, 2016
River Road Basin Sewer Rehabilitation (RR-01B)		June 15, 2016
Trumpet Branch Outfall		December 15, 2016
Skipwith Road, Donder Road & Comet Drive	Replace 2,595 feet of 8 inch diameter sewer main.	December 15, 2016
Wedgewood Avenue	Replace 2,780 feet of 8 inch diameter sewer main from Stoneleigh Rd to Buckingham Ave.	December 15, 2016
Baldwin Road, Wood Road & Sunderland Road	Replace 3,360 feet of 8 inch diameter sewer main in Westham Subdivision. Rehabilitation of a sub-basin to the Strawberry Hills Sewer Pumping Station. Provide SSES of 7.43 miles of sewer resulting in rehabilitation of an estimated 3 miles that is approximately 40% of sewers in the area. Construct approximately 16,400 feet of 108 inch diameter pipeline to provide 6 million gallons of flow equalization storage for wet weather flows.	December 15, 2016
Strawberry Hill Basin Sewer Rehabilitation (SH-02B)	Rehabilitation of a sub-basin to the Strawberry Hills Sewer Pumping Station. Provide SSES of 5.23 miles of sewer resulting in rehabilitation of an estimated 2.1 miles that is approximately 40% of sewers in the area. Rehabilitation of a sub-basin to the Strawberry Hills Sewer Pumping Station. Provide SSES of 5.50 miles of sewer resulting in rehabilitation of an estimated 2.2 miles that is approximately 40% of sewers in the area.	June 15, 2017
Lakeside to Strawberry Hills Storage		December 15, 2017
Strawberry Hill Basin Sewer Rehabilitation (SH-02C)		June 15, 2018
Strawberry Hill Basin Sewer Rehabilitation (SH-02D - pt 1)		June 15, 2018

Rehabilitation of a sub-basin to the Gillies Creek Sewer Pumping Station. Provide SSES of 9.28 miles of sewer resulting in rehabilitation of an estimated 3.7 miles that is approximately 40% of sewers in the area.

Gillies Creek Basin Sewer Rehabilitation (GC-08)

June 15, 2018